



REMARKS

Status of the Claims

Claims 23-40 are pending in the application.

Claims 23-40 stand rejected.

The Rejection under 35 U.S.C. 112, Second Paragraph

The Examiner has rejected claims 23-40 as being indefinite. Applicants have amended claims 24-31 herein to change “the additive” to read --the chewing gum ingredient--. Applicants have amended claim 32 to delete the phrase “said ingredient being incorporated internally into said gum”. Applicants submit that these amendments overcome the Examiner’s basis for the rejections.

In view of the above applicants respectfully submit that the rejection of claims 23-40 under 35 U.S.C. 112, second paragraph should be withdrawn.

The First Rejection Under 35 U.S.C. 103(a).

The Examiner has rejected claims 23-31, under 35 U.S.C. 103(a) as being unpatentable over Cherukuri et al. (US 4,961,935) or Yatka et al. (WO 95/08926). The Examiner refers applicants to paragraph 3, Paper 13 and additionally states:

... the palatinit in Cherukuri et al. is incorporated internally as part of the chewing gum ingredient composition, which composition may or may not be coated. The isomalt in Yatka et al. may be in powder form, i.e., granules, and is part of the internal gum composition.

Applicants had responded to paragraph 3, Paper 13 in a response dated October 29, 2001. Concerning applicants’ response the Examiner holds that:

Applicant’s contention that Cherukuri et al. (col 13, lines 50-57 and Table 2) refers to crunch provided by a coating is ill founded and without merit. Cherukuri et al. (col.12, lines 8-22) clearly discloses that Palatinit bulking agent is part of an internal chewing gum “composition”. Table 2 (Examples 6 and 7) shows that chewing gum compositions which include Palatinit as the bulking agent are crunchier than chewing gum compositions which including sorbitol or mannitol as the bulking agent. These chewing gum compositions may then be coated (col. 13, lines 58-60). Thus “crunch”, a relative term without clear meaning in this art, is provided by the Palatinit in Cherukuri et al. Similarly since the powdered isomalt in Yatka et al. is composed of granules, which are part of the internal chewing gum composition therein, some “crunch” a relative term, is inherently provided thereby. Moreover, the word crunch is not a positive limitation of applicant’s product claims.

Reconsideration and withdrawal is respectfully requested for the reasons as follow.

There is no teaching nor suggestion in Cherukuri et al. (US 4,961,935) of a chewing gum ingredient which is isomalt, which is granulated, which has a particle size greater than 50 mesh, and which has the property of providing crunch to a chewing gum. Cherukuri et al. teach chewing gum cores which are formulated with isomalt as the bulk sweetener. The isomalt is used to provide firmer texture and reduced moisture absorption properties to the gum core, properties which enable the gum core to be easily coated and thereby to provide a better coating, one wherein the coating has better crunch and crispness as compared with the crunch and crispness of a coated gum which does not contain isomalt in the core and is not as easily coated.

The question here appears to turn on whether or not Cherukuri et al. (US 4,961,935) teach that the inventive gum cores themselves, absent the confectionery coating, have crunch when chewed. The Examiner apparently holds that Cherukuri et al. teach that the inventive gum cores have a "crunch" when chewed, and that that property is due to the presence of the isomalt. Applicants had in a prior response pointed out that Cherukuri et al. teach that isomalt is used in gum cores to provide a firmer texture to the core which allows for easier coating and a crispier coating. The "crunch" or "crispness" of the coating was tested by Cherukuri et al. In the present action, the Examiner proposes that "applicants' position that Cherukuri et al. (col 13, lines 50-57 and Table 2) refers to crunch provided by a coating is ill founded and without merit" in that the Examiner holds that "Cherukuri et al. (col.12, lines 8-22) clearly discloses that Palatinit bulking agent is part of an internal chewing gum 'composition'. Table 2 (Examples 6 and 7) shows that chewing gum compositions which include Palatinit as the bulking agent are crunchier than chewing gum compositions which including sorbitol or mannitol as the bulking agent. These chewing gum compositions may then be coated (col. 13, lines 58-60)". Applicants again submit that a reading of the Cherukuri et al. reference shows the following facts, facts which rebut the Examiner's position.

Examples 1-4 at cols 11 and 12 demonstrate conventional chewing gum compositions. The degree of hardness is measured, and the firmness of the chewing gum, as determined by the hardness test, is compared and reported. Examples 5-7 at cols 12 and 13, demonstrate substantially anhydrous uncoated chewing gum centers. The degree of hardness is measured and again the firmness of the cores, absent coating, based on that result is reported as in Table 1 at col 13. These same Example 5-7 cores are then coated with a hard candy coating described as conventional. A hardness test is not conducted on these coated gums. These coated gums are tested for crunch. For this test an expert art panel is used to evaluate the crunch of the coated gums upon chewing. Table 2 at col 13 and the text at col 13 reports the crunch of the Palatinit containing coated gums as favorable compared to the comparative coated cores. In the succeeding paragraph Cherukuri et al. summarize with the statement that the gums of the invention are all firmer and easier to coat and that, although the coated gums are firmer in texture, they have an acceptable soft chew.

The sole disclosure of the property of "crunch" is, as applicants assert, found in the teaching of a coated gum core as shown in Table 2, coated gum cores 5-7. It was an

object of the Cherukuri et al. invention to provide a firm (and more moisture stable) gum core which of itself provides a better coating. There is no teaching that crunch is a part of the properties possessed by either the isomalt containing core, nor the comparative gum core, nor has the crunch of the cores been tested.

Subsequent to the above quoted statements by the Examiner the Examiner further holds that "Thus "crunch", a relative term without clear meaning in this art, is provided by the Palatinit in Cherukuri et al. Similarly since the powdered isomalt in Yatka et al. is composed of granules, which are part of the internal chewing gum composition therein, some "crunch" a relative term, is inherently provided thereby." It would appear from the Examiner's statements here that the Examiner proposes that one skilled in the art does not know what exactly what properties are possessed by a material described by the term crunch or even powder.

This statement that "crunch is a relative term without clear meaning in the art" is without foundation. In the present fact set it is clear that Cherukuri et al. had a clear understanding of the meaning of the term as did the expert art panel who applied an art test to evaluate the property. Applicants provide herein page 332 from "The American Heritage College Dictionary", Third Edition, Houghton Mifflin Company, New York, 1993 to show the common meaning of the term "crunch", which is the manner in which it is commonly understood by one skilled in the chewing gum art. Whereas the degree of crunch may vary whether or not a comestible possesses crunch is clearly understood by the expert in the art.

This statement by the Examiner in fact rebuts the Examiner's own position in support of *prima facie* obviousness. If one skilled in the art can not tell exactly what is conveyed by a reference teaching, if there is doubt as to what properties are possessed by the gum cores taught therein, and what properties are provided by the isomalt used therein or what properties are possessed by the isomalt used therein, then how can it be obvious as to what properties would be possessed by any isomalt product.

The Examiner has also cited Yatka et al. (WO 95/08926) in this matter. ("The isomalt in Yatka et al. may be in powder form, i.e., granules, and is part of the internal gum composition.", and, "... some "crunch" a relative term, is inherently provided thereby.") Applicants claim a granulated additive having a particle size greater than 50 mesh. The Examiner apparently cites Yatka et al. herein as providing this feature of the claimed invention. Applicants respectfully submit that this statement is also pure speculation on the part of the Examiner. There is no showing that the powdered crystalline isomalt used by Yatka et al. is in the form of, or contains, granules. Yatka et al. do not teach that the isomalt used therein is, or has, any granulated particles. A powder is not a granulate. Being in crystalline form does not render a powder into a granulate. Nowhere does Yatka et al. teach that powder has other than its common meaning.

The Examiner lastly holds that "the word crunch is not a positive limitation of applicant's product claims". Applicants do not see the point of this statement. The

claimed ingredient is a crunch providing ingredient. The art must show or suggest a crunch providing ingredient which consists essentially of isomalt, which is granulated and which has a particle size of greater than 50 mesh.

None of the cited primary references suggest a crystalline granulate isomalt having a particle size of greater than 50 mesh be used as a chewing gum ingredient to provide internal crunch to a gum. Wherein isomalt is used internally as a bulking agent in a chewing gum it is used in the form in which it is generally available, namely as a crystalline powder. There is no teaching, nor suggestion in any teaching, to the contrary.

In view of the above applicants respectfully submit that the rejection of claims 23-31 under 35 U.S.C. 103(a) should be withdrawn.

The Second Rejection Under 35 U.S.C. 103(a).

The Examiner has rejected claims 32-40, under 35 U.S.C. 103(a) as being unpatentable over Cherukuri et al. (US 4,961,935) or Yatka et al. (WO 95/08926) as above and further in view of Tanaka et al. (US 5,709,895). The Examiner refers applicants to paragraph 4, Paragraph No 13. The Examiner further states that "Although Tanaka et al. performs process steps not claimed by applicant, as applicant argues, applicants' claims are open ended and do not preclude such additional process steps". Applicants have amended claim 32 herein to limit the claimed process to consist essentially of the three, recited limiting steps. Reconsideration and withdrawal is respectfully requested for the reasons as follow.

Applicants teach and claim a process for the preparation of a granulated isomalt chewing gum ingredient for providing crunch internally to a chewing gum, wherein that process, as amended, consists essentially of the novel sequence of steps of heating isomalt at a temperature of 130°C or higher; cooling the isomalt to form a solid; and granulating the solid to a particle size greater than 50 mesh to provide the right texture modifying crunch additive.

Cherukuri et al. (US 4,961,935) and Yatka et al. (WO 95/08926) have been cited by the Examiner as primary references. Cherukuri et al. is detailed above. Cherukuri et al. do not teach any modification of the isomalt powder used therein. Yatka et al. is the only teaching which concerns modification of isomalt powder. Yatka et al. were chiefly concerned with encapsulating, agglomerating or absorbing the isomalt with another material to provide a controlled release product. Standard techniques were used to prepare the materials. In all cases the encapsulated material was ground to a powdered, coated sweetener or the powder was used to first form a syrup. Neither of these references suggest the claimed method.

The secondary reference, Tanaka et al., teaches a process for encapsulating a flavor which uses an encapsulating matrix composed of both a hydrogenated saccharide and a modified starch. This method by Tanaka et al. does not suggest the method taught and claimed by the applicants. Tanaka et al. blend materials to produce an encapsulate.

Required in that method are heating of the carbohydrate mix, a mixing stage for blending in a flavor, and a subsequent extrusion stage. Applicants claimed process does not have these required limitations. Applicants neither blend nor mix ingredients, nor heat and extrude. Applicants heat isomalt, neat or in a solution, to a temperature of 130°C or higher to remove moisture and/or melt the isomalt, cool the crystalline melt to form a solid isomalt without further processing and granulate the solid to provide the crunch additive of a size of greater than 50 mesh.

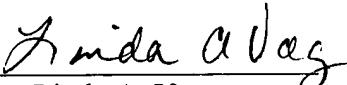
Tanaka et al. do not expressly nor inherently suggest applicants' claimed invention as amended herein. The primary references which teach isomalt do not suggest it.

In view of the above applicants respectfully submit that the rejection of claims 32-40 under 35 U.S.C. 103(a) should be withdrawn.

Conclusion

In view of the above applicants believe this application is in condition for allowance. Favorable action is solicited. If any questions remain, the resolution of which would be advanced by conference (telephonic or personal) with applicants' agent, the Examiner is invited to contact said agent at the telephone or the fax number noted below.

Respectfully submitted,
Mary K. Robinson et al.

By: 
Linda A. Vag
Their Agent
Reg. No.: 32,071

Date: 09/09/02

Telephone No.: (973) 385-4790
Fax No.: (973) 385-3117

Attachment: VERSION WITH MARKINGS TO SHOW CHANGES MADE

VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

Please amend claims 24-29 to change “The additive” to read --The chewing gum ingredient--

Claim 30 (amended)

The [additive] chewing gum ingredient of claim 23 wherein said granulated [additive] chewing gum ingredient has a particle size greater than 40 mesh.

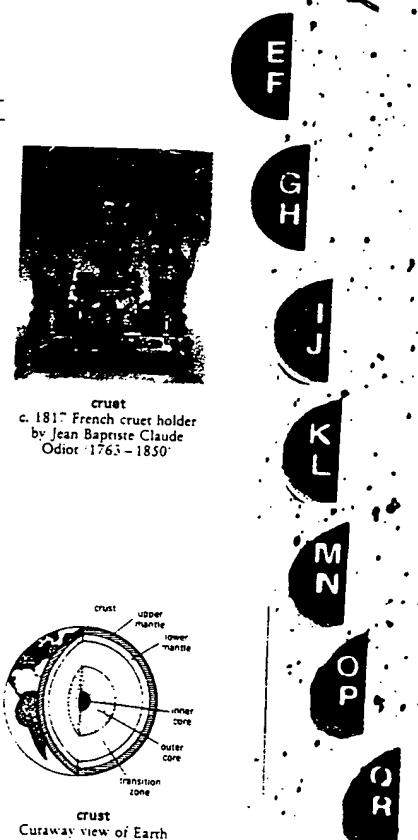
Claim 31 (amended)

The [additive] chewing gum ingredient of claim 30 wherein said granulated [additive] chewing gum ingredient has a particle size range of 30 mesh to 40 mesh.

Claim 32 (thrice amended)

A process for the preparation of a chewing gum ingredient which is a granulated additive for providing crunch to a chewing gum, [said ingredient being incorporated internally into said gum] wherein said crunch providing ingredient consists essentially of isomalt, said process [comprising] consisting essentially of:

- a) heating isomalt at a temperature of 130°C or higher;
- b) cooling to form a solid;
- c) granulating said solid to a particle size greater than 50 mesh.



à pat	oi boy
à pay	ou out
à care	oo cook
à father	oo bōō
é pet	ú cut
é be	úr urge
i pit	th thin
i ple	th this
ir pier	hw which
ó po:	zh vision
ó toe	ə about
ó paw	ər ter

Stress marks:

' primary
' secondary, as in
dictionary dīk'sha-nēr'

nament of
n; consum-
Games. To
t row, who
/t. To hit on
a large sac-
ifice. [ME
imē, korōne]

overnment is
ministered by

ceptionally
tension. 2. A
bubble to
center.
of a sovereign
ceremonial
vets.

omatic lens
ing or climb-
igascar and
like braces.

Gary. Pop-
ake Cham-
Indian War

ne.
or heir pre-
nce.
ons of two
rcle.
bottom edge

illa varnai
rol and har-
d leaves.
asting wre-
e eye. Often
y stitch.
ut platform
p of a shop's
short.
or cask
ove < VLA

ucing repro-
art. of cro-

it of impor-
2. Arch.
crucis. ex-
ads (exper-
ide.
r forming a
the wings of
[NLat. cro-
y adu-
a refractor
melting and
vere rest, as
night-light
ET.]

ross in a re-
in the river
includes the
cruce, cro-
x-as) adj.
of Jesus on
tion. [ME
zere, cruci-

t of cruci-
crucifying of
in the cross
is sufficing
oss; cruci-
il-form'

1. To pier-
2. To
; cruci-
; cruci-
; cruci-

[friddi] n. 1. Slang. a. A coating or an incrustation of filth
or refuse. b. Something loathsome, despicable, or worthless.
c. One who is contemptible or disgusting. 2. A disease or
disease, imaginary or real, esp. of the skin. [ME crudde, poss.
< OE *cruðen, p.part. of crudan, to press.]

[frid'ē] adj. -di'er, -di'est. Slang. Worthless, loath-
some, or disgusting. — crud'di'ness n.
[frid'ōd] adj. crud'e. crud'e-est. 1. Being in an unrefined
natural state; raw. 2. Lacking tact, refinement, or taste.
3. Not carefully or completely made; rough. b. Statistics. In
a analyzed form; not adjusted to allow for related cir-
cumstances or data. 4. Displaying a lack of knowledge or
intelligence. — n. A substance, esp. petroleum, in its unrefined state [ME < Lat. crudus. See kreus-*.] — crud'e'ly adv.
-crud'i-ty (frid'ē-tē) adj. crude'ness n.
[frid'n] n. Unrefined petroleum.

[frid'ōs] (frid'ō-tē) pl.n. Cut raw vegetables, such as carrots, often served with a dip as an appetizer. [Fr., pl. of
indigestibility < OFr. crudite < Lat. cruditas, indi-
gested food < crudus, raw. See crude.]

[frid'ōl] adj. -el'er, -el'est or -el'or, -el'lest. 1. Dis-
posed to inflict pain or suffering. 2. Causing suffering. [ME <
Fr. < Lat. crudelis. See kreus-*.] — cru'el'ly adv.

[frid'ōr] adj. cruel, fierce, ferocious, barbarous, inhuman, savage. These adjectives mean inclined to inflict violence, or hardness or to find satisfaction in the suffering of others. Cruel implies both disposition to harm and satisfaction or indifference to suffering; a cruel tyrant. Fierce suggests the fearless aggression of a wild animal; fierce anger. Savage adds to fierce connotations of rabid fury and rampa-
lity; a ferocious attack dog. Barbarous suggests savagery and cruelty that befit only primitive human beings: barbarous crime. Inhuman means markedly deficient in qualities such as kindness and sympathy; cruel and in-
human behavior. Savage implies wild or uncivilized behavior: an outburst of temper. Vicious suggests malicious, vio-
lent or destructive behavior: a vicious kick.

[frid'ō-tē] n., pl. -ties. 1. The quality or condition being cruel. 2. Something that causes pain or suffering.
[Lat. the infliction of physical or mental distress, esp. considered a determinant in granting a divorce.]

[frid'ōtē] n. 1. A small glass bottle for holding a con-
summation at the table. 2. A small vessel of holy water or for
water used in the consecration of the Eucharist. [ME
OFr. dim. of crue, flask, of Gmc. orig.]

[frid'ōshāngk'] George. 1792-1878. British

author and illustrator of works by Charles Dickens.

[frid'ōz] v. crushed, crud'sing, crud'ses. — intr. 1.a. To
travel about, as for pleasure. b. To go or move along,
as an unhurried or unconcerned fashion. 2. To travel at
maximum speed or at a speed providing maximum operating
time for a sustained period. 3.a. Informal. To move le-
isurely about an area in the hope of discovering something.
b. To look for a sexual partner, as in a public place.

4. To inspect a wooded area to determine its lumber yield.
5. To travel about or journey over. 2. To inspect in order
to determine lumber yield. — n. The act or an instance of
traveling, esp. a sea voyage for pleasure. [Du. kruisen, to cross
over, cross < MDu. cruce < Lat. crux, cruc-, cross.]

[frid'ōzəl] n. 1. A system in a motor vehicle for maintain-
ing a constant speed. 2. Maintenance of a constant speed in
a vehicle.

[frid'ōzəl] n. An aircraft without a crew that serves as a
platform for dropping a sustained bomb.

[frid'ōzər] n. 1. One of a class of fast warships of
tonnage with a long cruising radius and less armor
power than a battleship. 2. Naut. A cabin cruiser.

[frid'ōzər] n. 1. A small, usu. ring-shaped or twisted
piece of sweet dough fried in deep fat. 2. Chiefly New England

includes the
cruce, cro-
x-as) adj.
of Jesus on
tion. [ME
zere, cruci-

2. A contem-
plating, untrustworthy, or loathsome per-
son; a scoundrel.

[frid'ōzər] n. 1. A very small piece broken from a baked
good, as cake or bread. 2. A small fragment, scrap, or
scraps; crumb.

[frid'ōzər] n. 1. A contemptible, untrustworthy, or loathsome per-
son; a scoundrel.

[frid'ōzər] v. -bled, -bling, -bles. — tr. 1. To break
small pieces; crumble. 2. To cover or prepare with
small pieces of bread. 3. To brush (a table or cloth) clear
of small scraps or fragments of food. — intr. To break apart
small pieces of food.

[frid'ōzər] v. -bled, -bling, -bles. — tr. To break
small fragments or particles. — intr. 1. To fall into small
fragments; disintegrate. 2. To give way; collapse.
[ME cremenl < OE *cymelen, freq. of ge-
-menl.]

[frid'ōzər] adj. -bli'er, -bli'est. Easily crumbled;
fragile; brittle.

[frid'ōzər] n. Mus. Var. of krummhorn.

[frid'ōzər] adj. -mi'er, -mi'est also

-er, -est. Slang. 1. Miserable or wretched. 2. Shabby or
cheap; a crummy little rowboat. [Prob. < CRUMB.]

[frūmp] v. crumpled, crump'ing, crumps. — tr. 1. To
crush or crunch with the teeth. 2. To strike heavily with a
crunching sound. — intr. To make a crunching sound, esp. in
walking over snow. — n. 1.a. A crunching sound. b. The
sound of an exploding shell. 2. A heavy blow. [imit.]

[frūmpet] (frūmp'pit) n. A small flat round of bread, baked on
a griddle and usu. served toasted. [Poss. < ME crompid
(cake), curled (cake), prob. p.part. of crumpen, to curl up,
prob. < crumb, crump, crooked < OE.]

[frūmp'plē] (frūmp'pal) v. -pled, -pling, -ples. — tr. 1. To crush
together or press into wrinkles; rumple. 2. To cause to fall
apart. — intr. 1. To become wrinkled. 2. To fall apart; col-
lapse. — n. An irregular fold, crease, or wrinkle. [ME crum-
plen, prob. freq. of crumpen, to curl up. See CRUMPT.]

[frūmp'py] adj. — adj.

[frūnch] (frūnch) v. crunched, crunch'ing, crunch'es. — tr.

1. To chew with a noisy crackling sound. 2. To crush, grind,
or tread noisily. 3. Slang. To perform operations on; manip-
ulate or process (numerical or mathematical data). — intr.

1. To chew noisily with a crackling sound. 2. To move with a
crushing sound. 3. To produce or emit a crushing sound.
— n. 1. The act or sound of crunching. 2.a. A decisive con-
frontation. b. A critical moment or situation. [Alteration of
craunch, poss. of imit. orig.] — crunch'a'ble adj.

[frūncher] (frūncher) n. Slang. A finishing or decisive blow.

[frūnchy] (frūnchy) adj. -er, -est. Making a crunching or
cracking sound, as when chewed; crisp.

[frūp'per] (frūp'per) n. 1. A leather strap looped under a horse's
tail and attached to a harness or saddle to keep it from slipping forward.
2. The rump of a horse; the croup. [ME crouper < OFr. croupiere < croup, rump. See CROUP.]

[frūral] (frūral) adj. Of or relating to the leg, shank, or thigh.
[Lat. cruralis < crūs, crūr, leg.]

[frūs] (frūs) n., pl. cru'ra (frūrə). 1. The section of the
leg or hind limb between the knee and foot; shank. 2.a. A
limb-like part. b. A body part consisting of elongated masses or
diverging bands that resemble legs or roots. [Lat. crūs, crūr, leg.]

[frūsade] (frūsād') n. 1. Often Crusade. Any of the military
expeditions undertaken by European Christians in the 11th,
12th, and 13th centuries to recover the Holy Land from the
Muslims. 2. A holy war undertaken with papal sanction. 3. A
vigorous concerted movement for a cause or against an abuse.
[Fr. croisade and Sp. cruzada, both ult. < Lat. crux, cruc-,
cross.] — cru'sade' v. — cru'sader n.

[frūsado] (frūsādō) also cru'za-do (-zādō) n., pl. -does or
-dos. An old Portuguese coin of gold or silver having a cross
pictured on the reverse. [Port. < p.part. of cruzar, to mark
with a cross < cruce, cross < Lat. crux, cruc-.]

[frūse] (frūs) n. A small earthenware container for holding
liquids. [ME cruse, perh. < MDu. cruyse, pot.]

[frūsh] (frūsh) v. crushed, crush'ing, crush'es. — tr. 1. To
press between opposing bodies so as to break or injure. 2. To
break, pound, or grind (stone or ore, for example) into small
fragments or powder. 3. To put down; subdue. 4. To over-
whelm or oppress severely. 5. To crumple or rumple. 6. To
hug, esp. with great force. 7. To press upon, shove, or crowd.
8. To extract or obtain by pressing or squeezing. 9. Archaic.
To drink; quaff. — intr. 1. To be or become crushed. 2. To
proceed or move by crowding or pressing. — n. 1. The act of
crushing; extreme pressure. 2. The state of being crushed.
3. A great crowd. 4. A substance prepared by or as if by
crushing, esp. a fruit drink. 5. Informal. a. A usu. temporary
infatuation. b. The object of such an infatuation. 6. A decisive
or critical moment or situation. 7. The process of stamping or
crushing grapes for wine. [ME crushen < OFr. croisir, of
Gmc. orig.] — crush'a'ble adj. — crush'er n. — crush'-
proof' (-prüf') adj.

[crushed] (frūshēt) adj. Treated so as to have a permanently crin-
kled or rumpled appearance. Used of a fabric.

[crust] (frūst) n. 1.a. The hard outer portion or surface area of
bread. b. A piece of bread consisting mostly of the crust. c. A
hard and dry piece of bread. 2. A pastry shell, as of a pie.

3. A hard, crisp covering or surface. 4. A hard deposit formed
on the interior of a wine bottle as the wine matures. 5. Geol.
a. The exterior portion of the earth that lies above the Mor-
horovici discontinuity. b. The outermost solid layer of a
planet or moon. 6. The hard outer covering of certain plants
and animals. 7. Pathol. An outer layer formed by the drying
of a bodily exudate such as blood; a scab. 8. Informal. In-
solence; audacity; gall. — v. crust'ed, crust'ing, crusts.
— tr. 1. To cover with a crust. 2. To form into a crust. — intr.

1. To become covered with a crust. 2. To harden into a crust.
[ME cruste < OFr. croute < Lat. crusta. See Kreus-*.]
— crust'less adj.

[crustacean] (frūstāshān) n. Any of various predominantly
aquatic arthropods of the class Crustacea, including lobsters
and crabs, characteristically having a segmented body, a chitin-
ous exoskeleton, and paired jointed limbs. [*< NLat. Crus-
tacea, class name, neut. pl. of crustaceus, hard-shelled < Lat.*]

BEST AVAILABLE COPY

THE
AMERICAN
HERITAGE
COLLEGE
DICTIONARY

THIRD EDITION

A
B

C
D

E
F

G

H

HOUGHTON MIFFLIN COMPANY
Boston • New York

BEST AVAILABLE COPY

A:

CC

tl

ler

im

esi

nd

afc

ng

Def

var

nea

ook

he

re

nos

Cal:

ecb:

ew

o t

Col

voc

help

EX

Ho

ble

dic

defi

guic

He

Edi

cur

opi:

Am

of i

sch

Words are included in this Dictionary on the basis of their usage. Words that are known to have current trademark registrations are shown with an initial capital and are also identified as trademarks. No investigation has been made of common-law trademark rights in any word, because such investigation is impracticable. The inclusion of any word in this Dictionary is not, however, an expression of the Publisher's opinion as to whether or not it is subject to proprietary rights. Indeed, no definition in this Dictionary is to be regarded as affecting the validity of any trademark.

American Heritage and the eagle logo are registered trademarks of Forbes Inc. Their use is pursuant to a license agreement with Forbes Inc.

Copyright © 1993 by Houghton Mifflin Company.
All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Houghton Mifflin Company unless such copying is expressly permitted by federal copyright law. Address inquiries to Reference Permissions, Houghton Mifflin Company, 222 Berkeley Street, Boston MA 02116.

0-395-67161-2 (UPC)

Library of Congress Cataloging-in-Publication Data
The American heritage college dictionary. —3rd ed.

P. cm.
ISBN 0-395-66917-0 (plain edge). —ISBN 0-395-44638-4
(thumb edge). —ISBN 0-395-66918-9 (deluxe binding).
1. English language—Dictionaries. 2. Americanisms.
PE1628.A6227 1993

423—dc20

92-42124

CIP

Manufactured in the United States of America